## Claims

- A method for inhibiting expression of an FcεRI receptor in a cell, comprising:
   contacting a cell expressing an FcεRI receptor with an FcεRIβ chain variant in
   an effective amount to inhibit expression of the FcεRI receptor in the cell.
- 2. The method of claim 1, wherein the FcεRIβ chain variant is an isolated nucleic acid molecule that inhibits expression of an FcεRI receptor in the cell.
- 3. The method of claim 2, wherein the isolated nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO:3.
  - 4. The method of claim 1, wherein the FcεRIβ chain variant is an isolated peptide molecule that inhibits expression of an FcεRI receptor in the cell.
- 5. The method of claim 4, wherein the isolated peptide molecule comprises the amino acid sequence of SEQ ID NO:4.
  - 6. The method of claim 1, wherein the contacting occurs in vitro.
- 7. The method of claim 1, wherein the contacting occurs in vivo.

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8. A method for inhibiting expression of an FceRI receptor in a subject to treat a condition mediated by IgE, comprising:

administering to a subject in need of such treatment an FceRIß chain variant in an effective amount to inhibit FceRI receptor expression in a cell of the subject.

- 9. The method of claim 8, wherein the condition mediated by IgE is an allergic condition.
- 10. The method of claim 9, wherein the allergic condition is selected from the group consisting of atopy, anaphylaxis, urticaria, and angioedema.

- 11. The method of claim 8, wherein the FceRIB chain variant is an isolated nucleic acid molecule that inhibits expression of an FceRI receptor in the cell of the subject.
- 12. The method of claim 11, wherein the isolated nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO:3.

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- 13. The method of claim 8, wherein the FceRIB chain variant is an isolated peptide molecule that inhibits expression of an FceRI receptor in the cell of the subject.
- 14. The method of claim 13, wherein the isolated peptide molecule comprises the amino acid sequence of SEQ ID NO:4.
  - 15. The method according to any one of claims 8-14, further comprising co-administering an anti-allergic (anti-atopic) agent other than an FcεRIβ chain variant.
  - 16. A method of screening for FceRI receptor expression modulating agents, comprising:
  - (a) contacting a putative FceRI receptor expression modulating agent with a cell expressing an FceRI receptor,
    - (b) measuring FcERI receptor expression by the cell, and
- 20 (c) determining whether FcεRI receptor expression by the cell is altered compared to FcεRI receptor expression by a control cell, wherein the control cell is contacted with an FcεRIβ chain variant.
  - 17. The method of claim 16, wherein the FcεRIβ chain variant is an endogenous nucleic acid molecule of the cell.
    - 18. The method of claim 16, wherein the FcεRIβ chain variant is a heterologous nucleic acid molecule of the cell.
- 19. The method according to any one of claims 17 or 18, wherein the FcεRIβ chain variant comprises the nucleotide sequence of SEQ ID NO:3.

- 20. The method of claim 16, wherein measuring FceRI receptor expression in the cell comprises using an anti-FceRI chain-specific antibody.
- 21. A method of screening for FcεRIβ chain variant expression modulating agents, comprising:
  - (a) contacting a putative FcεRIβ chain variant expression modulating agent with a test cell expressing an FcεRIβ chain variant,
    - (b) measuring FcεRIβ chain variant expression by the cell, and

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- (c) determining whether FcεRIβ chain variant expression by the cell is altered compared to a control cell expressing an FcεRIβ chain variant in the absence of a putative FcεRIβ chain variant expression modulating agent.
  - 22. The method of claim 21, wherein measuring FcεRIβ chain variant expression by the cell comprises using RT-PCR.
  - 23. The method of claim 21, wherein the control cell expresses an FceRI $\beta$  chain variant identical to the FceRI $\beta$  chain variant expressed by the test cell.
  - 24. A method for inhibiting expression of an FcεRIα chain in a cell, comprising:

    contacting a cell expressing an FcεRIα chain with an FcεRIβ chain variant in an effective amount to inhibit expression of the FcεRIα chain in the cell.
  - 25. The method of claim 24, wherein the FcεRIβ chain variant is an isolated nucleic acid molecule that inhibits expression of an FcεRIα chain.
  - 26. The method of claim 25, wherein the isolated nucleic acid molecule comprises the nucleotide sequence of SEQ ID NO:3.
  - 27. The method of claim 24, wherein the contacting occurs in vitro.
  - 28. The method of claim 24, wherein the contacting occurs in vivo.

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29. A method for determining whether a subject has a condition mediated by IgE or a predisposition thereto, comprising:

determining  $FceRI\beta$  chain variant expression in a subject suspected of having a condition mediated by IgE or a predisposition thereto, and

comparing the FceRIB chain variant expression to a control,

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wherein lower levels of FceRIß chain variant expression in the subject as compared to the control are indicative for the presence of, or a predisposition to, a condition mediated by IgE in the subject.

- 10 30. The method of claim 29, wherein FcεRIβ chain variant expression is mRNA expression.
  - 31. The method of claim 29, wherein FceRIB chain variant expression is peptide expression.